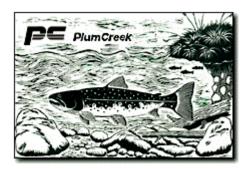
Plum Creek Timber Company Higher and Better Use Lands and Implications for Native Fish Conservation

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Purpose: To assess those lands Plum Creek has identified as Higher and Better Use (HBU) in relation to the potential impact on bull trout, and to outline appropriate approaches for mitigation of potential adverse impacts as commitments under the Plum Creek Native Fish Habitat Conservation Plan (NFHCP).

I. Land Base

A. Real Estate Identification

After Plum Creek acquired 865,000 acres from Champion International in 1993, it began an extensive review of its entire Rocky Mountain Region ownership to identify properties that may have potential for Higher and Better Use (HBU). These are defined as lands which have higher values for their non-timber amenities such as for recreation and conservation. Approximately 110,000 acres in 34 Study Areas were identified in the Region, all of it in Montana. This amounts to approximately seven percent of the company ownership in the Region. Of the area identified, approximately two-thirds (71,000 acres) of the identified HBU land is contained within two major river corridors, the Thompson and Fisher. The Company has identified most of the lands considered to have HBU potential; however, some additional lands may be identified as HBU as time goes on.

Currently, Plum Creek has not identified any HBU lands within the project area in Idaho and Washington so this background paper focuses primarily on Montana.

B. HBU Activity

Plum Creek adopted Land Use Principles (attached) in 1995 for HBU lands as a complement to its Environmental Principles that guide forest management. The Land Use Principles support comprehensive land use planning and land use concepts that lead to conservation or environmentally responsible development.

In 1996, Plum Creek initiated a program to sell or exchange its HBU lands in the Rocky Mountain Region. As of October 1998, approximately 22,000 acres of land has been offered for sale and 17,000 acres has been sold. Of this, 11,790 acres (70%) has been sold to the public (Bureau of Land Management, Montana Fish, Wildlife, and Parks); 2,438 acres (14%) to conservation buyers; 840 acres (5%) to adjacent landowners; and 1,932 acres (11%) to developers. The largest sale was to The Nature Conservancy for 11,730 acres including 10 miles along the Blackfoot River, which will eventually be transferred to the Bureau of Land Management.

Plum Creek is also engaged in other projects with conservation objectives for HBU land, including:

- Babcock Exchange with the U.S. Forest Service (USFS) which includes a section of land on Rock Creek in Granite County (expected completion 1998);
- Thompson Chain of Lakes Exchange with Montana Department Fish, Wildlife, and Parks that proposes to exchange 600 acres of high value lakefront for 1,500 acres of timberland (expected completion 1998);
- · Lindbergh Lake Option which proposes to sell 2,500 acres to the Trust for Public Land over 3 years to be acquired eventually by the Flathead National Forest;
- · Fisher River/ Thompson River Project which has recently been initiated with Montana Fish, Wildlife, and Parks to explore the possibility of selling recreation and development rights to the State of Montana; 70,000 acres to 150,000 acres of Plum Creek land is under consideration.

C. Bull Trout and HBU

There are approximately 77,000 acres of land identified as HBU within watersheds important to bull trout. Of this, the vast majority of the land (92%) is within the Thompson (39,000 acres) and Fisher (32,000 acres) river drainages. Approximately 6,150 acres, which is eight percent of the identified HBU land within bull trout watersheds, are identified as being within Tier 1 Basins. An additional 2,500 acres are within the Lindbergh Lake watershed, which is known to support bull trout.

The HBU land that is most important relative to bull trout is within the floodplain of river and stream courses. It is estimated that HBU land borders 74 miles of streams designated as "key migratory rivers" for bull trout in the NFHCP. Of this, 51 miles (69%) are along the Fisher and Thompson Rivers. Flood plains have not been delineated on all of these waterways, and a general estimate is that 2,000 to 2,300 acres of HBU land is within the floodplain on rivers and streams important to bull trout.

II. Existing Regulation in Montana

There are various state and local regulations that control land uses and consequently reduce impacts of land management activities on bull trout. Outlined below is a summary of these measures.

A. Floodplain Regulations

State law requires counties to adopt floodplain regulations to manage land use changes within floodplain. The regulations require a permit for any activity to place or construct an artificial obstruction within a floodway or floodplain. The law prohibits construction of buildings within the floodway and allows buildings within the floodplain if the lowest floor elevation is at least 2 feet above the 100-year floodplain.

All the counties that contain identified HBU land have adopted floodplain regulations.

B. Subdivision Regulations

State law requires counties to adopt subdivision regulations to promote the public health, safety, and general welfare by regulating the subdivision of land. The definition of subdivision is the creation of any parcel that contains less than 160 acres of land. The regulations prohibit subdivisions for building purposes within the 100-year floodplain. The law requires local governments to review subdivisions for the following primary criteria: the effect on agriculture, agricultural water user facilities, local services, the natural environment, wildlife and wildlife habitat, and public health and safety.

All of the counties that contain identified HBU land have adopted subdivision regulations.

C. Natural Streambed and Land Preservation Act of 1975

This law is administered by Conservation Districts in each county. The law requires a permit for any "project," described as a physical alteration or modification of a stream that results in a change in the state of the stream. The "project" area includes the banks adjacent to the stream. The Standards and Guidelines outline criteria to minimize adverse impacts to streams and address erosion, channel alteration, protection of streambank vegetation, and criteria for rip rap. The Rules prohibit placement of road fill or debris in a

stream, projects that permanently prevent fish migration, operation of construction equipment in a stream, and excavation of Streambed gravels.

All of the Conservation Districts that contain identified HBU land have adopted rules under this law.

D. Lakeshores

State law allows local governments to adopt regulations to control work done in lakes or on lakeshores. "Lakeshore" is defined as the perimeter of a lake at mean annual high-water elevation and includes land within 20 horizontal feet from that high-water elevation. A permit is required for any work that will alter or diminish the course, current, or cross-sectional area of a lake or its lakeshore and includes construction of channels and ditches, dredging, lagooning, filling, and construction of docks and wharves. The criteria for issuance of a permit are if the project will <u>not</u> diminish water quality, diminish habitat for fish or wildlife, interfere with navigation or recreation, create a public nuisance, or create a visual impact discordant with natural scenic values.

Three counties have Lakeshore regulations for areas that contain identified HBU land. Missoula County has regulations for Salmon Lake and Lindbergh Lake; Lake County has regulations for Lake Mary Ronan and Swan Lake; Flathead County has regulations for McGregor Lake, Little Bitterroot Lake, Ashley Lake, and Rogers Lake. Of these lakes, Swan, Lindbergh, and Salmon Lakes are known to support bull trout.

E. Unique County plans and regulations

1. Missoula County

a. County Plan and Zoning

Missoula has an adopted a General Plan that is updated in an on-going manner for various areas in the County. Except within existing communities, the Plan designates areas that contain HBU land owned by Plum Creek as "Rural Resource and Open Space." The density guideline for this designation is one dwelling unit per 40 acres.

Missoula County has adopted a Zoning Ordinance for Lindbergh Lake that includes land within 200 feet of the lakeshore. The regulations prohibit commercial use, establish a minimum lot size of 25,000 square feet, and a setback for buildings of 50 feet from the lake. All of the lakeshore property owned by Plum Creek (2,500 acres) is under an Option Agreement with the Trust for Public Land.

b. Riparian Resource Protection Standards

Missoula County adopted these regulations in 1995. The regulations prohibit subdivisions that are determined to be wholly within areas of riparian resource, or will impact on areas of riparian resource. An area of riparian resource means a stream, lake, wetland or other body of water and land containing wetland habitat and community types and an adjacent area of varying width where development may have significant negative impacts on wildlife habitat or water quality and quantity, fish, or other aquatic resources. The habitat types are extensive (40 types) and are based upon a publication of the School of Forestry at the University of Montana (Classification and Management of Riparian and Wetland Sites in Montana, 1991).

The regulations require a management plan be submitted for any subdivision that may include areas of riparian resources. The plan needs to include proposed access to and through the area, proposed low-impact use of the area, planned restoration of the area with native species, planned mitigation of impacts from all uses, and planned buffer to mitigate development adjacent to areas of riparian resources. Approval of the management plan by the governing body is required as a condition of subdivision approval.

2. Powell County

Powell County recently adopted a Comprehensive Plan and Zoning Ordinance for the Blackfoot Valley that encumbers identified HBU lands. The Plan and Zoning require a minimum lot size of 160 acres. It provides for minimal commercial use. The Zoning also requires a building setback from the Blackfoot River and North Fork of the Blackfoot River to be 75 feet from the high-water line.

3. Lake County

Lake County has an adopted Comprehensive Plan that requires a building setback of 50 feet from streams and lakes. A Neighborhood Plan and Zoning Regulation has been adopted for Lake Mary Ronan which encumbers all of the Plum Creek property around the lake (approximately 2,000 acres) and establishes use and density standards. Use is limited to residential; density on the lake is limited to 2 acres per dwelling unit on the east shore and 5 acres per dwelling unit on the west shore. The Zoning provides for minimal commercial use.

4. Flathead County

Flathead County has an adopted Comprehensive Plan along with neighborhood plans and development codes for Little Bitterroot Lake, Ashley Lake, and Rogers Lake. Plum Creek is the majority landowner around these lakes and the development codes restrict use to residential, establish densities from 5 to 20 acres per dwelling unit, and

require a building setback of 50 feet from the shoreline. The Zoning on all these lakes provides for minimal commercial use.

III. Threats to Bull Trout

A. Science Perspective

The Montana Bull Trout Restoration Team has stated in its May 1998 Report (page 25) entitled "The relationship between land management activities and habitat requirements of bull trout" that:

"In summary, the most serious effects of residential and industrial development on trout habitat include: reductions in habitat complexity caused by channelization, bank armoring, and removal of vegetation and large woody debris; chronic degradation of water quality resulting from frequent releases of pollutants; reduced substrate quality resulting from increased sediment delivery to stream channels; modification of flow regimes (both groundwater and surface water); and losses of floodplain and riparian vegetation."

The report also states that "Non-native fish in private ponds pose a significant risk to native fish populations."

Additionally, the Final Rule listing bull trout as threatened addresses residential development as one of the threats to bull trout.

Any of these concerns that are not addressed by existing regulation will be addressed in an appropriate manner within the Bull Trout Habitat Conservation Plan.

B. Regulatory Adequacy

The various state and local regulations provide significant conservation for riparian areas and these measures benefit bull trout. As stated previously, the major area of concern is within Flood plains, for which a permit is required for any activity to place or construct an artificial obstruction within a floodway or floodplain.

There are some concerns about impacts to bull trout on Plum Creek HBU land within or adjacent to flood plains that current regulations may not directly address. These concerns include; requirements for leave trees and natural vegetation; standards for road location and construction; controls for use of toxic materials such as pesticides and insecticides; control of animal waste; standards to limit impervious surface areas; and control of private pond development. Plum Creek addresses these concerns with appropriate conservation measures.

IV. Conservation Measures

Plum Creek provided the United States Fish and Wildlife Service (USFWS) with a Conceptual Approach to the Bull Trout HCP in October 1997. Plum Creek committed to three measures in the section on Land Use Planning. Outlined below is a summary of the status of these measures.

A. Land Use Principles

As discussed previously, Plum Creek adopted these principles in 1995 and has been implementing them as part of its land use and land sale program. Examples of accomplishments under these principles include adoption of county zoning at Little Bitterroot Lake, Lake Mary Ronan, Ashley Lake, and Rogers Lake. Plum Creek will continue to be guided by these principles for planning and sale or exchange of its HBU lands.

B. Conservation buyers

Plum Creek has established working relationships with conservation organizations including The Nature Conservancy, The Trust for Public Land, and Montana Land Reliance to seek conservation buyers for sensitive lands. The major accomplishments to date include the sale of the Blackfoot Corridor to The Nature Conservancy and the Option Agreement with The Trust for Public Land to sell the Lindbergh Lake property. In July, 1998, Plum Creek sold approximately 2,000 acres with six miles of riverfront on the Blackfoot River to a group of owners who worked with the Montana Land Reliance to place conservation easements on the property. Plum Creek will continue to seek conservation buyers for sensitive HBU properties such as lands important for bull trout habitat.

C. Land Use Plan

Plum Creek has prepared a Land Use Plan for lands within Tier 1 watersheds and along key migration corridors to provide for appropriate mitigation for bull trout. The Plan will focus attention on potential impacts within the floodway and floodplain. It will address requirements for leave trees and maintenance of natural vegetation, road location and construction standards, controls for toxic materials, standards to limit impervious surface areas, and controls to restrict private pond development.